

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A herbicide composition consisting essentially of components:
 - (a) at least one chlorinated carboxylic acid herbicide in the acid form wherein said chlorinated carboxylic acid herbicide is
Chloramben, dicamba, 2,4,5-trichlorophenoxy acetic acid, 2,4-
dichlorophenoxy acetic acid, 2,4-dichlorophenoxy butyric acid,
clomeprop, dichlorprop, dichlorprop-P, monochlorophenoxy acetic acid,
monochlorophenoxy butyric acid, mecoprop, mecoprop-P, clopyralid, fluroxypyr,
picloram, triclopyr, quinclorac or quinmerac,
 - (b) at least one surfactant in an effective amount such that said chlorinated carboxylic acid herbicide is fully dissolved in the surfactant and wherein said at least one surfactant
is selected from the group consisting of
Alcohol alkoxylate,
Alcohol alkoxylate sulfate,
Alkylphenol alkoxylate,
Alkanolamide,
Alkylaryl sulfonate,
Amine oxide,
Betaine,
Block polymers of ethylene and propylene glycol,
Carboxylated alcohol or alkylphenol alkoxylate,
Diphenyl sulfonate,

463649_1

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

Ethoxylated amine,

Ethoxylated fatty acid,

Ethoxylated fatty ester and oil,

Ethylene carbonate,

Fatty ester,

Glycerol ester,

Phosphate ester surfactant,

Sarcosine,

Silicone-based surfactant,

Sorbitan,

Sucrose,

Glucose,

Sulfate of alkoxylated alkylphenol ,

sulfonate of alkoxylated alkylphenol,

Sulfate of alcohol and

Tristyrylphenol Alkoxyate and optionally

(c) an ester of (2,4-dichlorophenoxy)acetic acid,

and said at least one surfactant component (b) is present in a quantity equal to or greater than said at least one chlorinated carboxylic acid herbicide component (a).

2. (Canceled)

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

3. (Previously presented) The herbicide composition as claimed in claim 1, wherein at most 25% by weight of an ester of (2,4-dichlorophenoxy)acetic acid is present.
4. (Previously presented) The herbicide composition as claimed in claim 1, wherein at most about 15% by weight of an ester of (2,4-dichlorophenoxy)acetic acid is present.
5. (Previously presented) The herbicide composition as claimed in claim 1, wherein at most about 10% by weight of an ester of (2,4-dichlorophenoxy)acetic acid is present.
6. (Previously presented) The herbicide composition as claimed in claim 1, wherein at most about 5% by weight of an ester of (2,4-dichlorophenoxy)acetic acid is present.
7. (Previously presented) The herbicide composition as claimed in claim 1, wherein at most about 2% by weight of an ester of (2,4-dichlorophenoxy)acetic acid is present.
8. (Original) The herbicide composition as claimed in claim 1, wherein said surfactant is present in an amount of at least about 10% by weight.
9. (Previously presented) The herbicide composition as claimed in claim 1, wherein said surfactant is present in an amount of at least about 20% by weight.
10. (Original) The herbicide composition as claimed in claim 3, wherein said surfactant is present in an amount of at least about 30% by weight.
11. (Original) The herbicide composition as claimed in claim 4, wherein said surfactant is present in an amount of at least about 40% by weight.

463649_1

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

12. (Original) The herbicide composition as claimed in claim 1, wherein said surfactant is present in an amount of at least about 50% by weight.
13. (Original) The herbicide composition as claimed in claim 3, wherein said surfactant is present in an amount of at least 50% by weight.
14. (Original) The herbicide composition as claimed in claim 4, wherein said surfactant is present in an amount of at least 50% by weight.
15. (Original) he herbicide composition as claimed in claim 5, wherein said surfactant is present in an amount of at least 50% by weight.
16. (Original) The herbicide composition as claimed in claim 6, wherein said surfactant is present in an amount of at least 50% by weight.
17. (Original) The herbicide composition as claimed in claim 7, wherein said surfactant is present in an amount of at least 50% by weight.
18. (Original) The herbicide composition as claimed in claim 1, wherein said surfactant is present in an amount from about 50 to about 90% by weight.
19. (Canceled)
20. (Original) The herbicide composition as claimed in claim 3, wherein said surfactant is present in an amount from about 50 to about 90% by weight.

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

21. (Original) The herbicide composition as claimed in claim 6, wherein said surfactant is present in an amount from about 50 to about 90% by weight.
22. (Original) The herbicide composition as claimed in claim 1, wherein said surfactant is present in an amount from about 70 to about 80% by weight.
23. (Original) The herbicide composition as claimed in claim 3, wherein said surfactant is present in an amount from about 70 to about 80% by weight.
24. (Original) The herbicide composition as claimed in claim 4, wherein said surfactant is present in an amount from about 70 to about 80% by weight.
25. (Original) The herbicide composition as claimed in claim 5, wherein said surfactant is present in an amount from about 70 to about 80% by weight.
26. (Original) The herbicide composition as claimed in claim 6, wherein said surfactant is present in an amount from about 70 to about 80% by weight.
27. (Original) The herbicide composition as claimed in claim 7, wherein said surfactant is present in an amount from about 70 to about 80% by weight.
28. (Original) The herbicide composition as claimed in claim 1, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 1 to about 50% by weight.
29. (Canceled)

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

30. (Original) The herbicide composition as claimed in claim 3, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 1 to about 50% by weight.
31. (Original) The herbicide composition as claimed in claim 5, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 1 to about 50% by weight.
32. (Original) The herbicide composition as claimed in claim 7, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 1 to about 50% by weight.
33. (Original) The herbicide composition as claimed in claim 18, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 1 to about 50% by weight.
34. (Original) The herbicide composition as claimed in claim 21, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 1 to about 50% by weight.
35. (Original) The herbicide composition as claimed in claim 22, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 1 to about 50% by weight.
36. (Original) The herbicide composition as claimed in claim 26, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 1 to about 50% by weight.
37. (Original) The herbicide composition as claimed in claim 1, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 5 to about 30% by weight.

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

38. (Previously presented) The herbicide composition as claimed in claim 4, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 5 to about 30% by weight.
39. (Previously presented) The herbicide composition as claimed in claim 7, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 5 to about 30% by weight.
40. (Canceled)
41. (Original) The herbicide composition as claimed in claim 3, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 5 to about 30% by weight.
42. (Original) The herbicide composition as claimed in claim 5, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 5 to about 30% by weight.
43. (Original) The herbicide composition as claimed in claim 17, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 5 to about 30% by weight.
44. (Previously presented) The herbicide composition as claimed in claim 18, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 5 to about 30% by weight.
45. (Original) The herbicide composition as claimed in claim 21, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 5 to about 30% by weight.

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

46. (Original) The herbicide composition as claimed in claim 22, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 5 to about 30% by weight.
47. (Original) The herbicide composition as claimed in claim 26, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 5 to about 30% by weight.
48. (Original) The herbicide composition as claimed in claim 1, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 10 to about 20% by weight.
49. (Canceled)
50. (Original) The herbicide composition as claimed in claim 3, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 10 to about 20% by weight.
51. (Original) The herbicide composition as claimed in claim 5, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 10 to about 20% by weight.
52. (Original) The herbicide composition as claimed in claim 7, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 10 to about 20% by weight.
53. (Previously presented) The herbicide composition as claimed in claim 18, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 10 to about 20% by weight.
54. (Original) The herbicide composition as claimed in claim 21, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 10 to about 20% by weight.

463649_1

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

55. (Original) The herbicide composition as claimed in claim 22, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 10 to about 20% by weight.
56. (Original) The herbicide composition as claimed in claim 27, wherein said chlorinated carboxylic acid herbicide is present in an amount from about 10 to about 20% by weight.
57. (Previously presented) The herbicide composition as claimed in claim 1, wherein an aromatic solvent is present in an amount of at most 50% by weight.
58. (Previously presented) The herbicide composition as claimed in claim 1, wherein an aromatic solvent is present in an amount of at most 40% by weight.
59. (Previously presented) The herbicide composition as claimed in claim 1, wherein an aromatic solvent is present in an amount of at most 30% by weight.
60. (Previously presented) The herbicide composition as claimed in claim 1, wherein an aromatic solvent is present in an amount of at most 20% by weight.
61. (Previously presented) The herbicide composition as claimed in claim 1, wherein an aromatic solvent is present in an amount of at most 15% by weight.
62. (Previously presented) The herbicide composition as claimed in claim 1, wherein an aromatic solvent is present in an amount of at most 10% by weight.
63. (Previously presented) The herbicide composition as claimed in claim 1, wherein an aromatic solvent is present in an amount of at most 5% by weight.

463649_1

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

64. (Previously presented) The herbicide composition as claimed in claim 1, wherein the composition has at most about 10% by weight of an ester of (2,4-dichlorophenoxy)acetic acid and said chlorinated carboxylic acid herbicide is present in an amount from about 10 to about 20% by weight, and said surfactant is present in an amount from about 70 to about 80% by weight.
65. (Previously presented) The herbicide composition as claimed in claim 64, wherein a solvent is present.
- 66-70. (Canceled)
71. (Previously presented) The herbicide composition as claimed in claim 3, wherein said chlorinated carboxylic acid herbicide is a benzoic acid, phenoxy-carboxylic acid or pyridine carboxylic acid.
- 72-81. (Canceled)
82. (Previously presented) The herbicide composition as claimed in claim 1, wherein at least one additional component is present and is selected from the group consisting of,
- Alkylated soybean oil,
 - Alkylated canola oil,
 - Alkylated coconut oil,
 - Alkylated sunflower oil,
 - Mineral oil,
 - Vegetable oil,

463649_1

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

Fatty acid,
Polybutene and
Epoxified seed oil.

83. (Previously presented) The herbicide composition as claimed in claim 1, wherein at least one additional component is present and is selected from the group consisting of

Methylated C6-C19 fatty acid,
Methylated Tall oil fatty acid,
Methylated Oleic acid,
Methylated Linoleic acid,
Methylated Linolenic acid,
Methylated Stearic acid,
Methylated Palmitic acid,
Ethylated C6-C19 fatty acid,
Ethylated Tall oil fatty acid,
Ethylated Oleic acid,
Ethylated Linoleic acid,
Ethylated Linolenic acid,
Ethylated Stearic acid,
Ethylated Palmitic acid,
Butylated C6-C19 fatty acid,
Butylated Tall oil fatty acid,

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

Butylated Oleic acid,
Butylated Linoleic acid
Butylated Linolenic acid,
Butylated Stearic acid,
Butylated Palmitic acid,
Methylated soybean oil,
Ethylated soybean oil,
Butylated soybean oil,
Methylated canola oil,
Ethylated canola oil,
Butylated canola oil,
Methylated coconut oil,
Ethylated coconut oil,
Butylated coconut oil,
Methylated sunflower oil,
Ethylated sunflower oil,
Butylated sunflower oil,
Paraffinic mineral oil,
Naphthenic mineral oil,
Aromatic mineral oil,
Soybean oil,
Canola oil,

463649_1

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

Cottonseed oil,
C6-C19 fatty acid,
Tall oil fatty acid,
Oleic acid,
Linoleic acid,
Linolenic acid,
Stearic acid,
Palmitic acid and
Epoxified soybean oil.

84. (Previously presented) The herbicide composition as claimed in claim 3, wherein at least one additional component is present and is selected from the group consisting of

Methylated fatty acid,
Ethylated fatty acid,
Butylated fatty acid,
Alkylated soybean oil,
Alkylated canola oil,
Alkylated coconut oil,
Alkylated sunflower oil,
Mineral oil,
Vegetable oil,
Fatty acid,

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

Polybutene and

Epoxified seed oil.

85. (Previously presented) The herbicide composition as claimed in claim 3, wherein at least one additional component is present and is selected from the group consisting of

Methylated C6-C19 fatty acid,

Methylated Tall oil fatty acid,

Methylated Oleic acid,

Methylated Linoleic acid,

Methylated Linolenic acid,

Methylated Stearic acid,

Methylated Palmitic acid,

Ethylated C6-C19 fatty acid,

Ethylated Tall oil fatty acid,

Ethylated Oleic acid,

Ethylated Linoleic acid,

Ethylated Linolenic acid,

Ethylated Stearic acid,

Ethylated Palmitic acid,

Butylated C6-C19 fatty acid,

Butylated Tall oil fatty acid,

Butylated Oleic acid,

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

Butylated Linoleic acid
Butylated Linolenic acid,
Butylated Stearic acid,
Butylated Palmitic acid,
Methylated soybean oil,
Ethylated soybean oil,
Butylated soybean oil,
Methylated canola oil,
Ethylated canola oil,
Butylated canola oil,
Methylated coconut oil,
Ethylated coconut oil,
Butylated coconut oil,
Methylated sunflower oil,
Ethylated sunflower oil,
Butylated sunflower oil,
Paraffinic mineral oil,
Naphthenic mineral oil,
Aromatic mineral oil,
Soybean oil,
Canola oil,
Cottonseed oil,

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

C6-C19 fatty acid,
Tall oil fatty acid,
Oleic acid,
Linoleic acid,
Linolenic acid,
Stearic acid,
Palmitic acid and
Epoxified soybean oil.

86. (Canceled)

87. (Currently amended) The herbicide composition as claimed in claim 1, wherein the at least one surfactant is selected from the group consisting of

- A) Alcohol alkoxylate based on branched and linear alcohols containing ethylene oxide or propylene oxide
- B) Alcohol alkoxylate sulfate,
- C) Nonylphenol alkoxylate containing ethylene oxide,
- D) Nonylphenol alkoxylate containing propylene oxide,
- E) Octylphenol alkoxylate containing ethylene oxide
- F) Octylphenol alkoxylate containing propylene oxide,
- G) Fatty amine alkoxylate,
- ~~H) Butanediol,~~
- ~~I) Butyl cellulose ether,~~

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

- ~~D) Butyl carbitol,~~
- ~~K) Propylene glycol,~~
- ~~L) Ethylene glycol,~~
- ~~M) Dipropylene glycol,~~
- ~~N) Diethylene glycol,~~
- O) Phosphate esters of alcohol alkoxylate,
- P) Phosphate esters of alkylphenol alkoxylate,
- Q) Sorbitan ester,
- R) Alkoxylated sorbitan ester and
- S) Alkylpolyglucoside.

88. (Canceled)

89. (Previously presented) The herbicide composition as claimed in claim 3, wherein the at least one surfactant is selected from the group consisting of

- A) Alcohol alkoxylate based on branched and linear alcohols containing ethylene oxide or propylene oxide
- B) Alcohol alkoxylate sulfate,
- C) Nonylphenol alkoxylate containing ethylene oxide,
- D) Nonylphenol alkoxylate containing propylene oxide,
- E) Octylphenol alkoxylate containing ethylene oxide
- F) Octylphenol alkoxylate containing propylene oxide,
- G) Fatty amine alkoxylate,

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

- H) ~~Butanediol,~~
- I) ~~Butyl cellulose ether,~~
- J) ~~Butyl carbitol,~~
- K) ~~Propylene glycol,~~
- L) ~~Ethylene glycol,~~
- M) ~~Dipropylene glycol,~~
- N) ~~Diethylene glycol,~~
- O) Phosphate ester of alcohol alkoxylate,
- P) Phosphate ester of alkylphenol alkoxylate,
- Q) Sorbitan ester,
- R) Alkoxylated sorbitan ester and
- S) Alkylpolyglucoside.

90. (Canceled)

91. (Previously presented) The herbicide composition as claimed in claim 71, wherein the at least one surfactant is selected from the group consisting of

- A) Alcohol alkoxylate based on branched and linear alcohols containing ethylene oxide or propylene oxide
- B) Alcohol alkoxylate sulfate,
- C) Nonylphenol alkoxylate containing ethylene oxide,
- D) Nonylphenol alkoxylate containing propylene oxide,
- E) Octylphenol alkoxylate containing ethylene oxide

463649_1

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

- F) Octylphenol alkoxylate containing propylene oxide,
- G) Fatty amine alkoxylate,
- H) ~~Butanediol,~~
- I) ~~Butyl cellulose ether,~~
- J) ~~Butyl carbitol,~~
- K) ~~Propylene glycol,~~
- L) ~~Ethylene glycol,~~
- M) ~~Dipropylene glycol,~~
- N) ~~Diethylene glycol,~~
- O) Phosphate ester of alcohol alkoxylate,
- P) Phosphate ester of alkylphenol alkoxylate,
- Q) Sorbitan ester,
- R) Alkoxylated sorbitan ester and
- S) Alkylpolyglucoside.

92. (Previously presented) The herbicide composition as claimed in claim 1, wherein said chlorinated carboxylic acid herbicide is a synthetic auxin or a quinoline carboxylic acid.

93.-96 (Canceled)

97. (Previously presented) A herbicide composition comprising at least one chlorinated carboxylic acid herbicide in the acid form and at least one surfactant in an effective amount such that said chlorinated carboxylic acid herbicide is fully dissolved in the

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

surfactant and at least one additional component and said at least one surfactant is present in a quantity equal to or greater than said at least one chlorinated carboxylic acid herbicide and said at least one additional component is selected from the group consisting of

Methylated fatty acid,
Ethylated fatty acid,
Butylated fatty acid,
Alkylated soybean oil,
Alkylated canola oil,
Alkylated coconut oil,
Alkylated sunflower oil,
aromatic mineral oil,
Vegetable oil,
Fatty acid,
Polybutene and
Epoxified seed oil.

98. (New) A herbicide composition consisting essentially of components:
- (a) at least one chlorinated carboxylic acid herbicide in the acid form,
 - (b) at least one surfactant in an effective amount such that said chlorinated carboxylic acid herbicide is fully dissolved in the surfactant and optionally
 - (c) an ester of (2,4-dichlorophenoxy)acetic acid,

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

(d) an aromatic solvent is present in an amount of at most 50% by weight
and said at least one surfactant component (b) is present in a quantity equal to or greater
than said at least one chlorinated carboxylic acid herbicide component (a).

99. (New) A herbicide composition consisting essentially of components:

- (a) at least one chlorinated carboxylic acid herbicide in the acid form,
- (b) at least one surfactant in an effective amount such that said chlorinated carboxylic acid herbicide is fully dissolved in the surfactant and optionally
- (c) an ester of (2,4-dichlorophenoxy)acetic acid,

and said at least one surfactant component (b) is present in a quantity equal to or greater
than said at least one chlorinated carboxylic acid herbicide component (a) and wherein
the composition has at most about 10% by weight of an ester of (2,4-
dichlorophenoxy)acetic acid and said chlorinated carboxylic acid herbicide is present in
an amount from about 10 to about 20% by weight, and said surfactant is present in an
amount from about 70 to about 80% by weight.

100. (New) A herbicide composition consisting of components:

- (a) at least one chlorinated carboxylic acid herbicide in the acid form
- (b) at least one surfactant in an effective amount such that said chlorinated carboxylic acid herbicide is fully dissolved in the surfactant,
- (c) optionally an ester of (2,4-dichlorophenoxy)acetic acid,

463649_1

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

(d) optionally an aromatic solvent in amount of at most 50% by weight , and
optionally

(e) one additional component selected from the group consisting of,

Alkylated soybean oil,

Alkylated canola oil,

Alkylated coconut oil,

Alkylated sunflower oil,

Mineral oil,

Vegetable oil,

Fatty acid,

Polybutene and

Epoxified seed oil,

and said at least one surfactant component (b) is present in a quantity equal to or greater
than said at least one chlorinated carboxylic acid herbicide component (a).

101. (New) The herbicide composition as claimed in claim 97, wherein said at least one
additional component is selected from the group consisting of
Methylated fatty acid,

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

Ethylated fatty acid,
Butylated fatty acid,
Alkylated soybean oil,
Alkylated canola oil,
Alkylated coconut oil,
Alkylated sunflower oil,
Vegetable oil,
Fatty acid,
Polybutene and
Epoxified seed oil.

102. (New) The herbicide composition as claimed in claim 100, wherein said at least one additional component is selected from the group consisting of

Methylated fatty acid,
Ethylated fatty acid,
Butylated fatty acid,
Alkylated soybean oil,
Alkylated canola oil,
Alkylated coconut oil,
Alkylated sunflower oil,
Vegetable oil,
Fatty acid,

AUG. 17. 2006 11:29AM

NO. 2747 P. 31

Application No. 09/916611
Reply to Office Action of May 3, 2006

Docket No.: 00306-00142-USU

Polybutene and

Epoxified seed oil.

463649_1

25